

FIG. 1

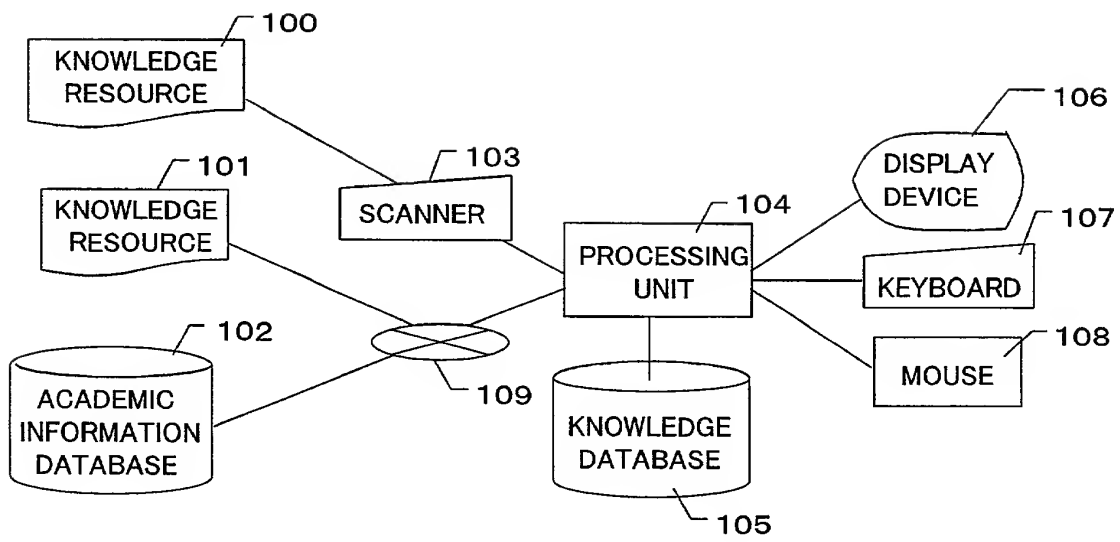


FIG. 2

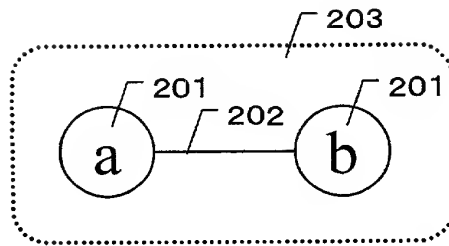


FIG. 3

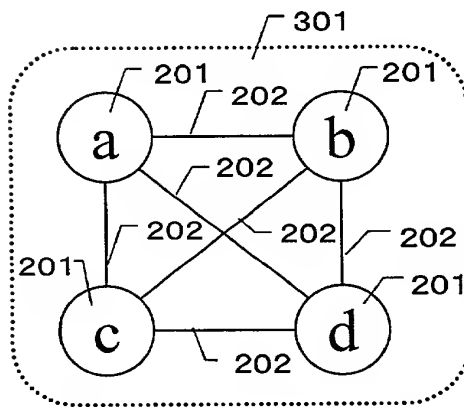


FIG. 4

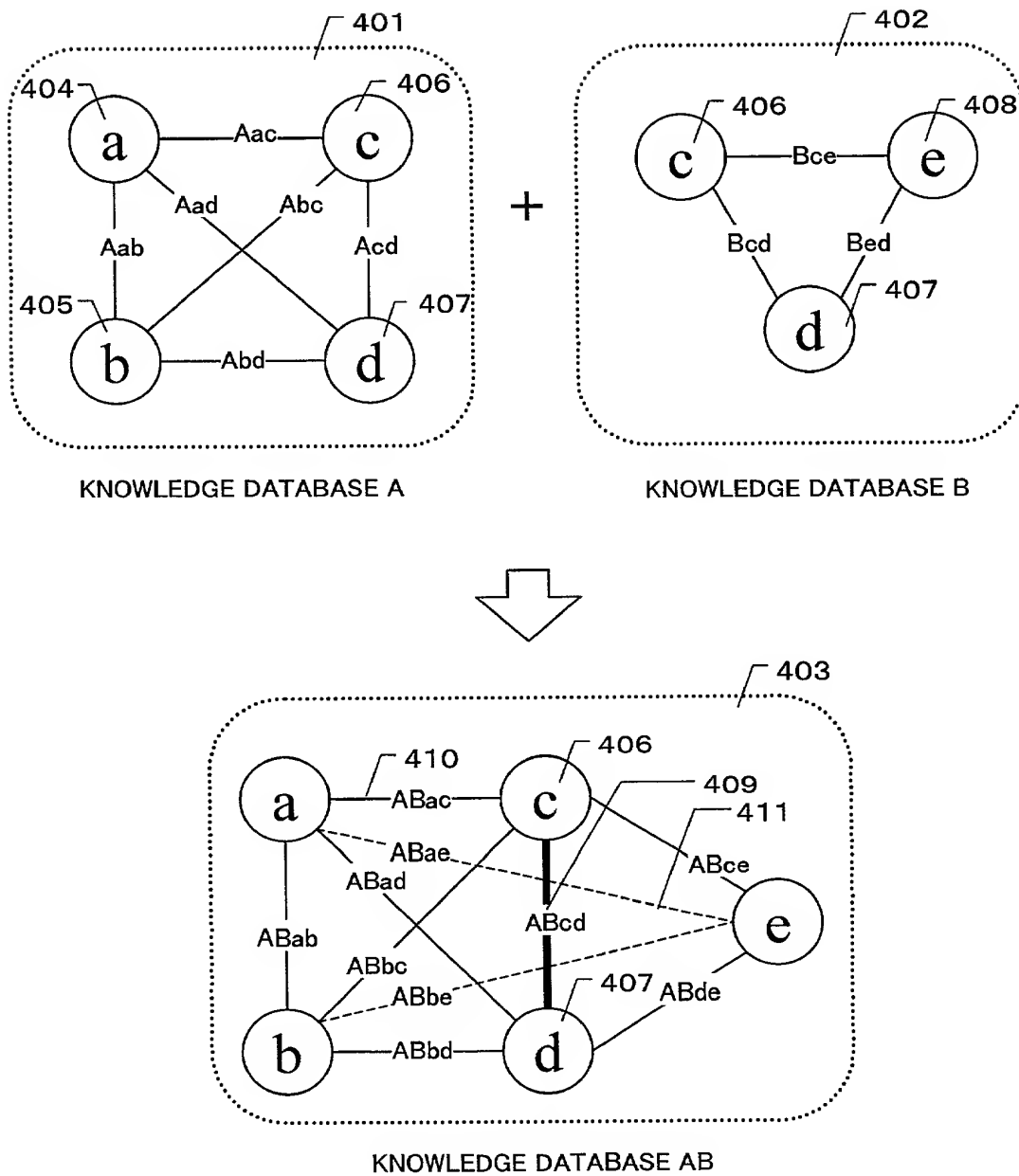


FIG. 5

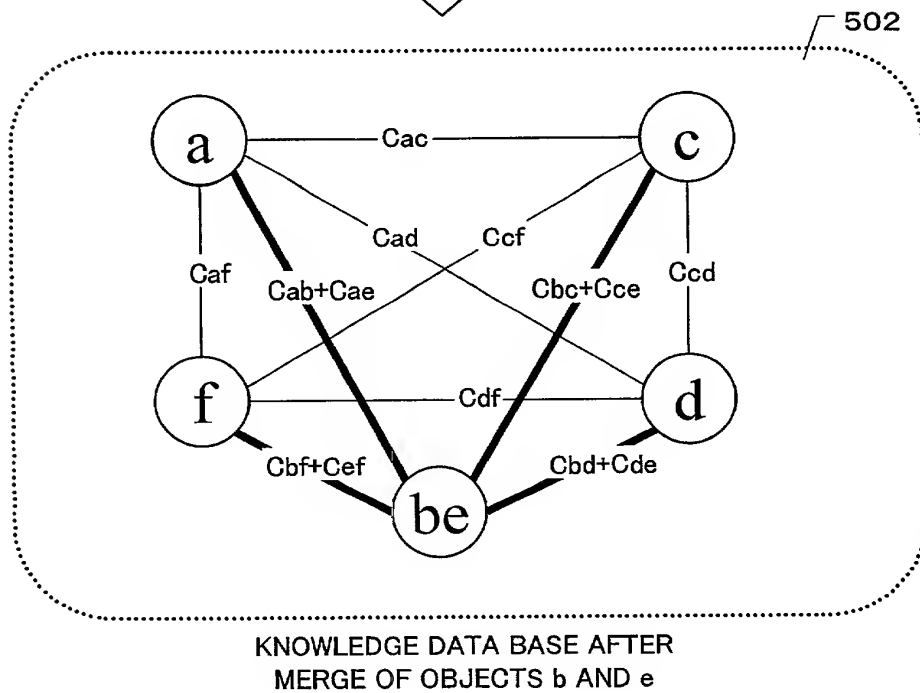
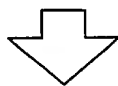
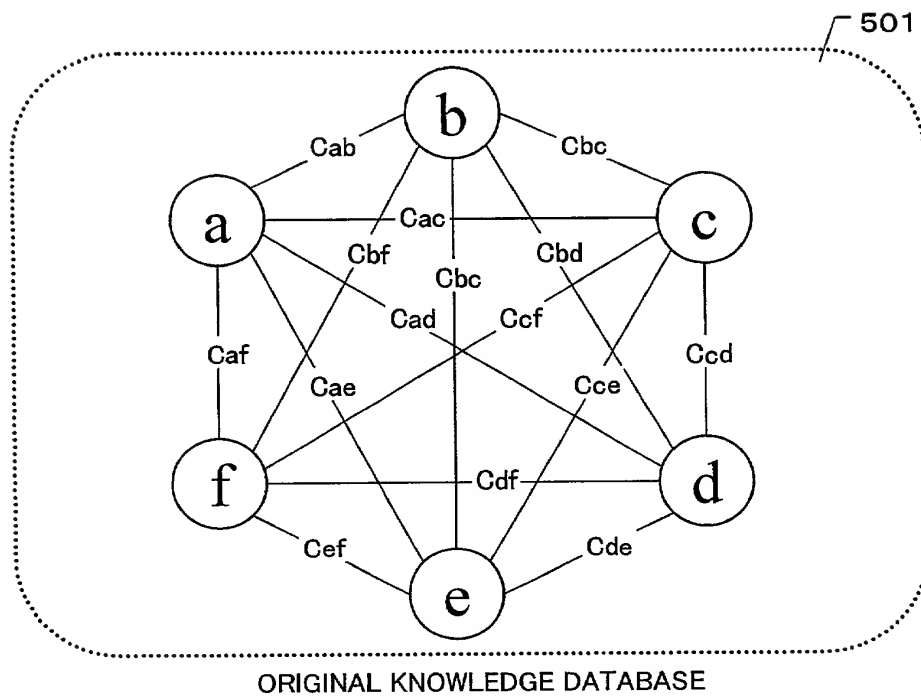
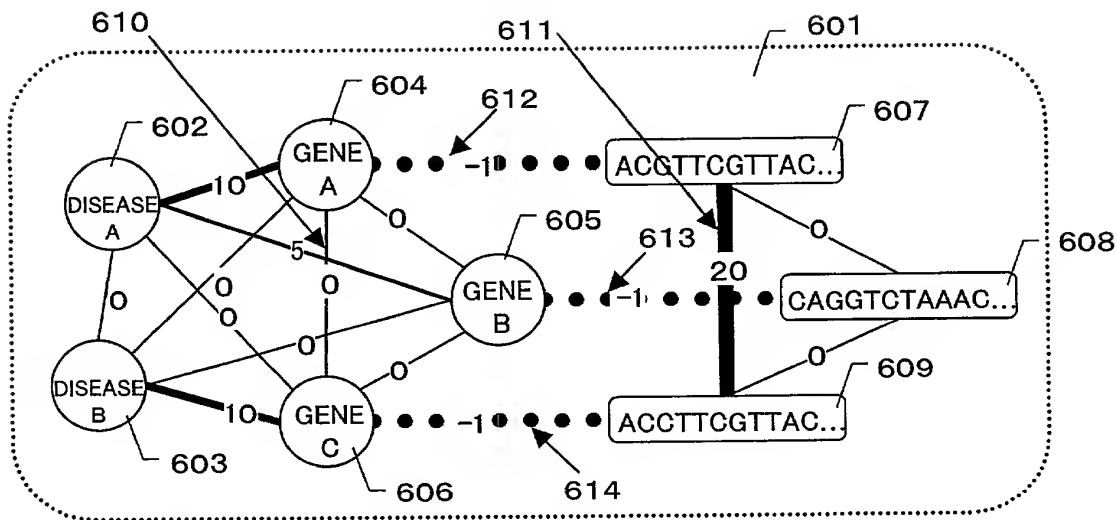


FIG. 6



KNOWLEDGE DATABASE WHERE DIFFERENT TYPES OF OBJECTS EXIST

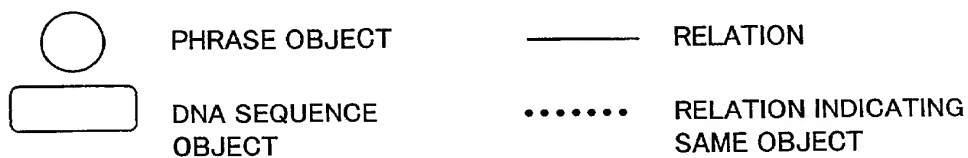


FIG. 7

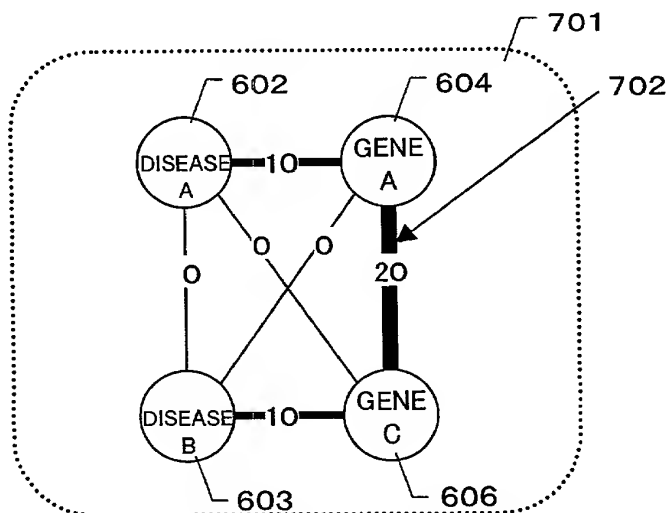


FIG.8

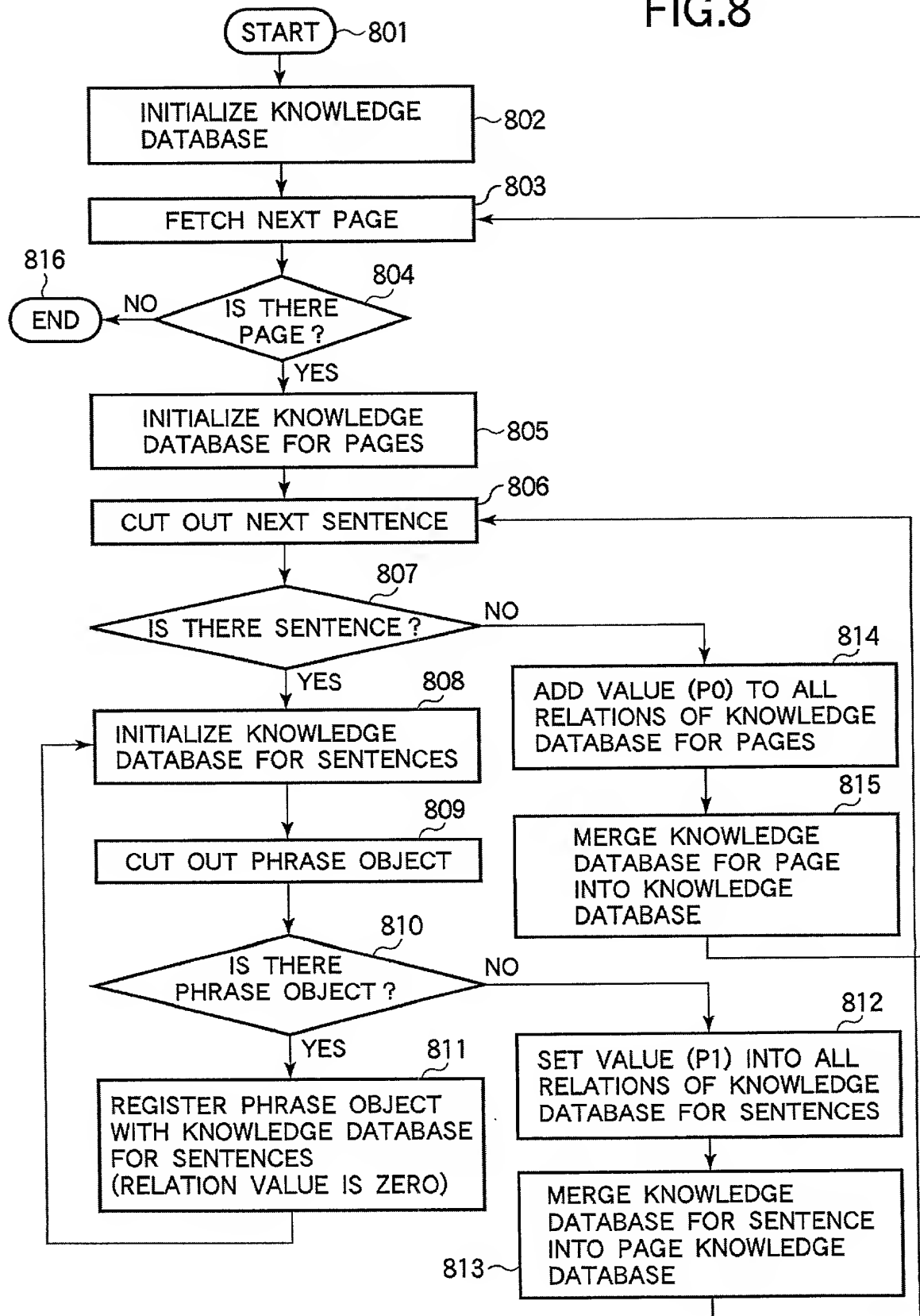


FIG.9

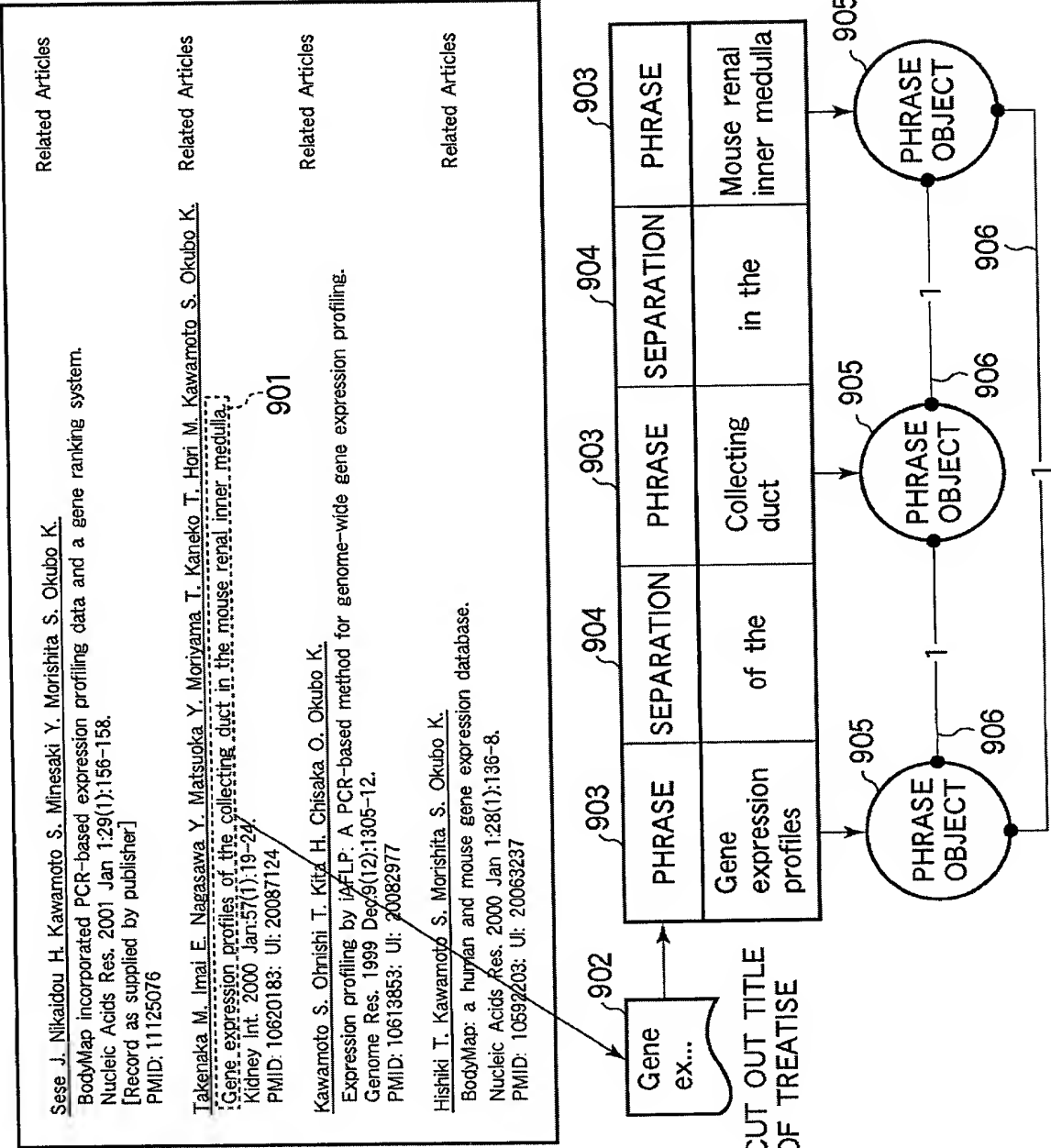


FIG.10

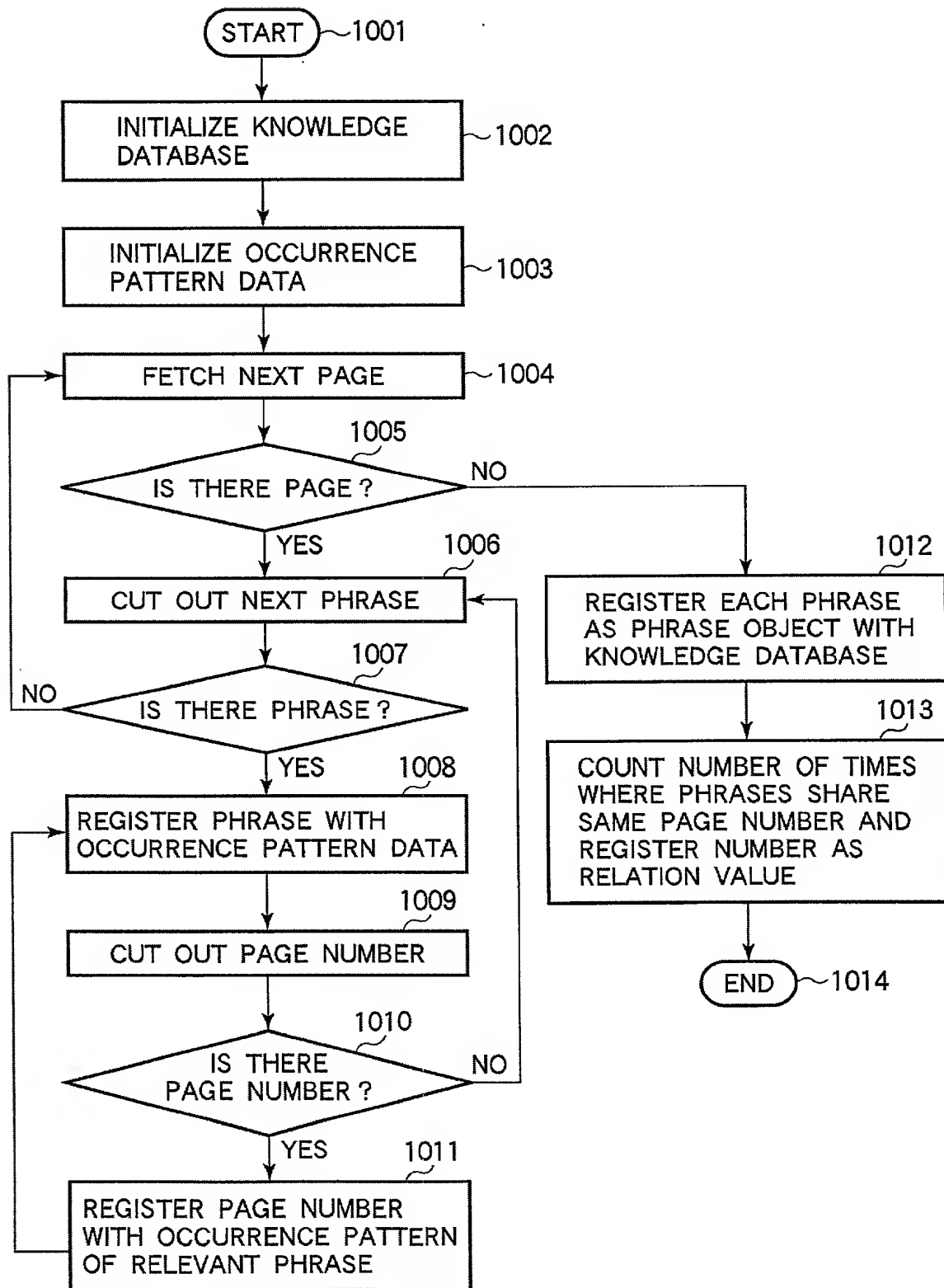


FIG.11

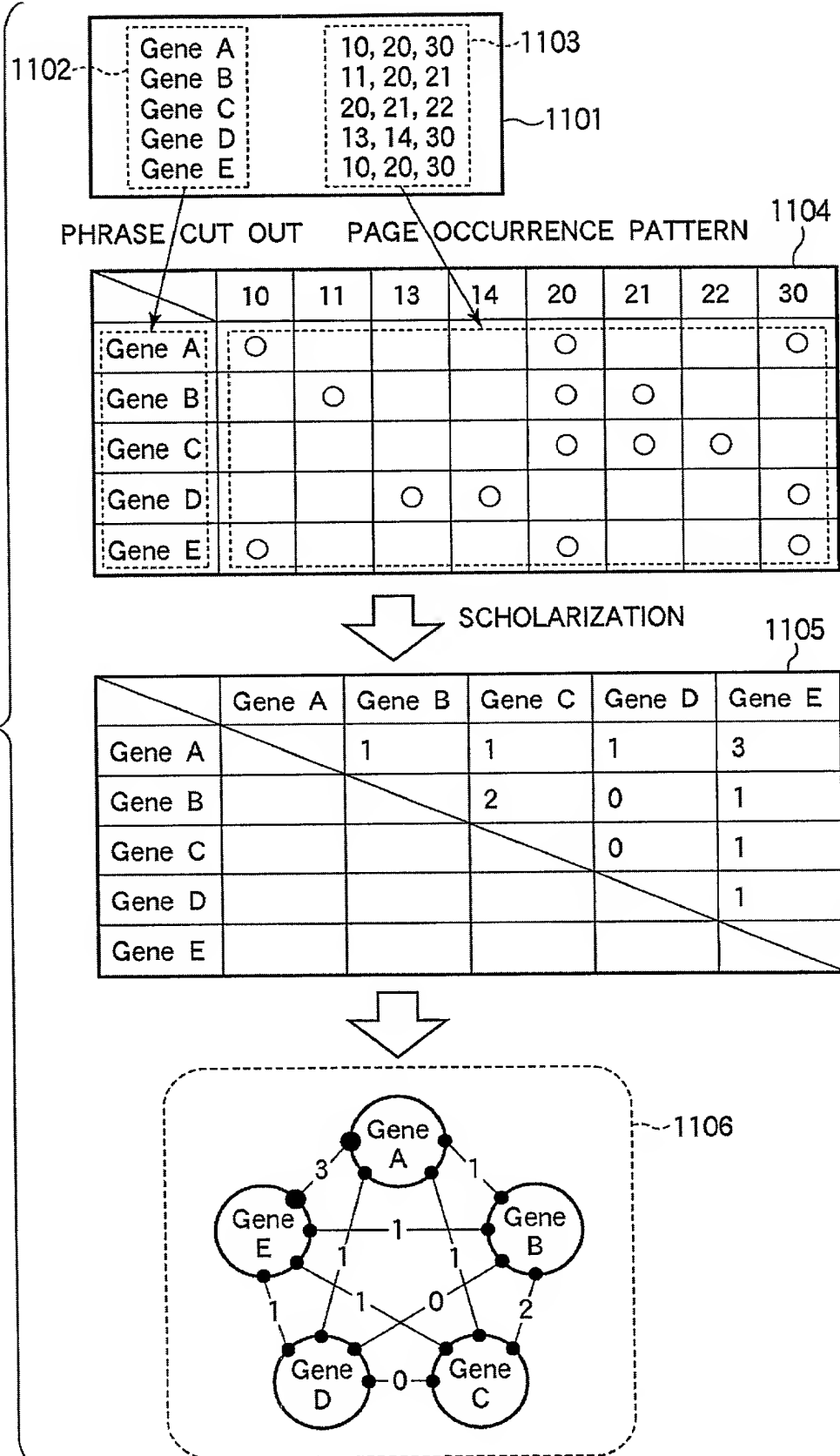


FIG.12

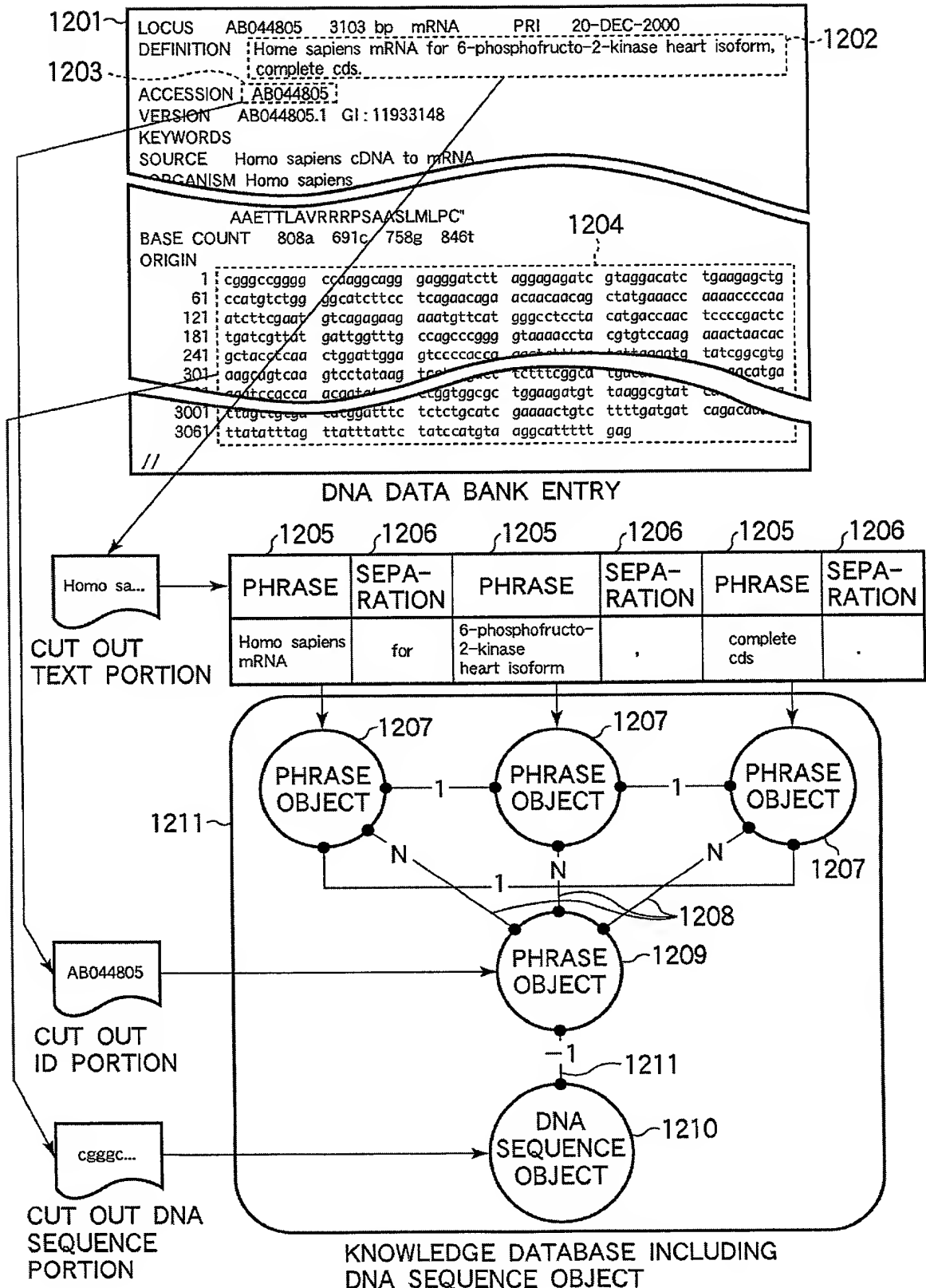


FIG.13

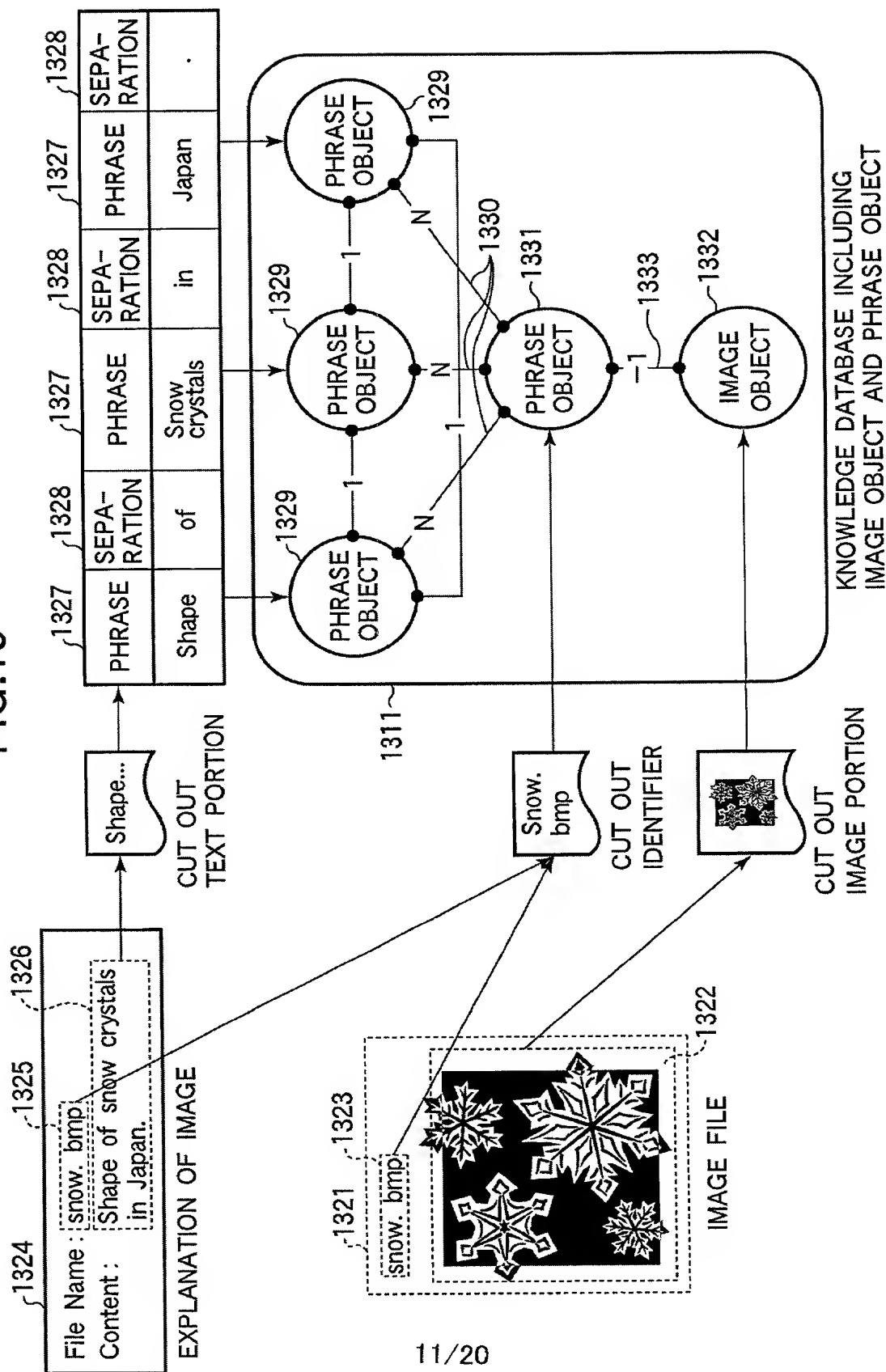


FIG. 14

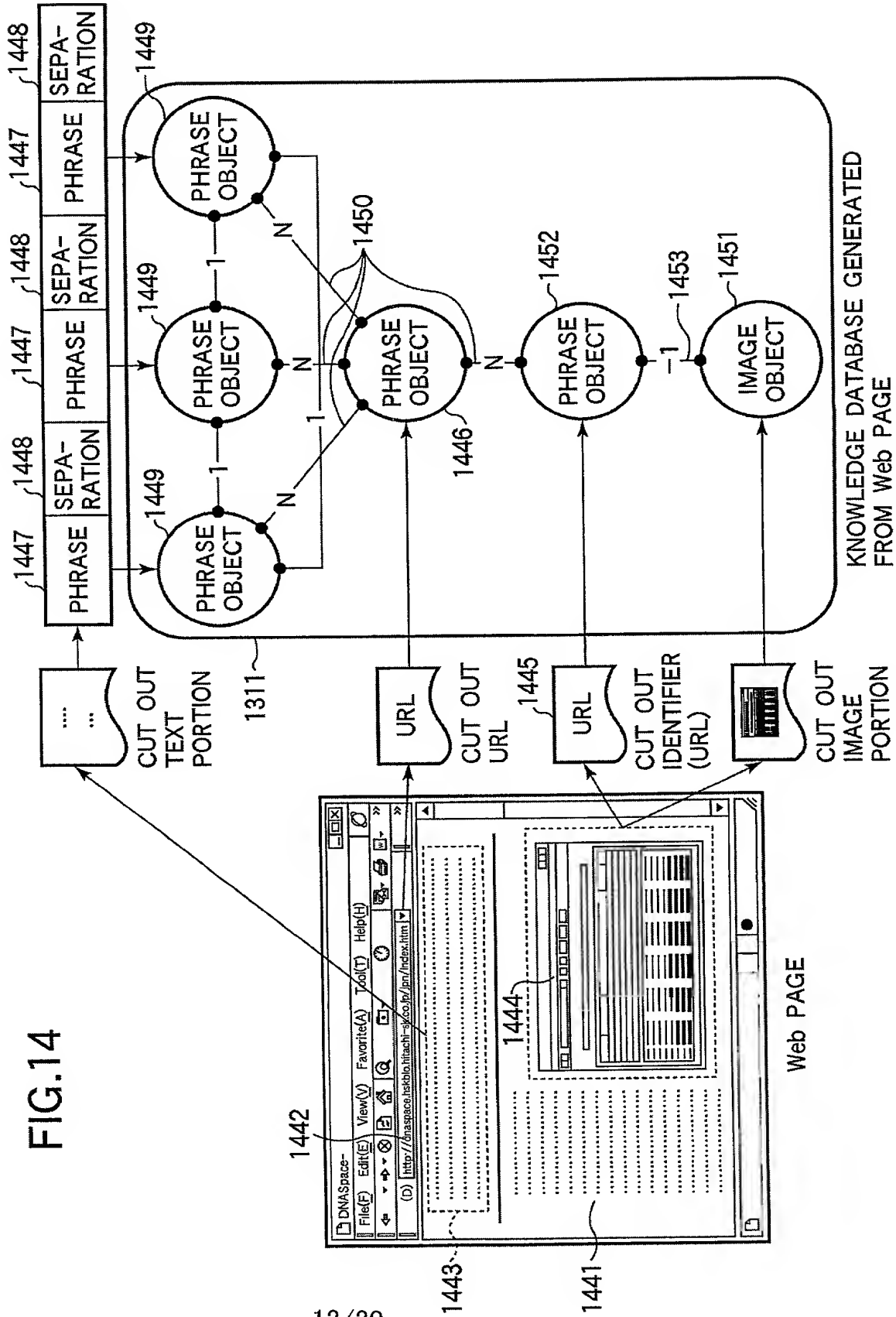


FIG.15

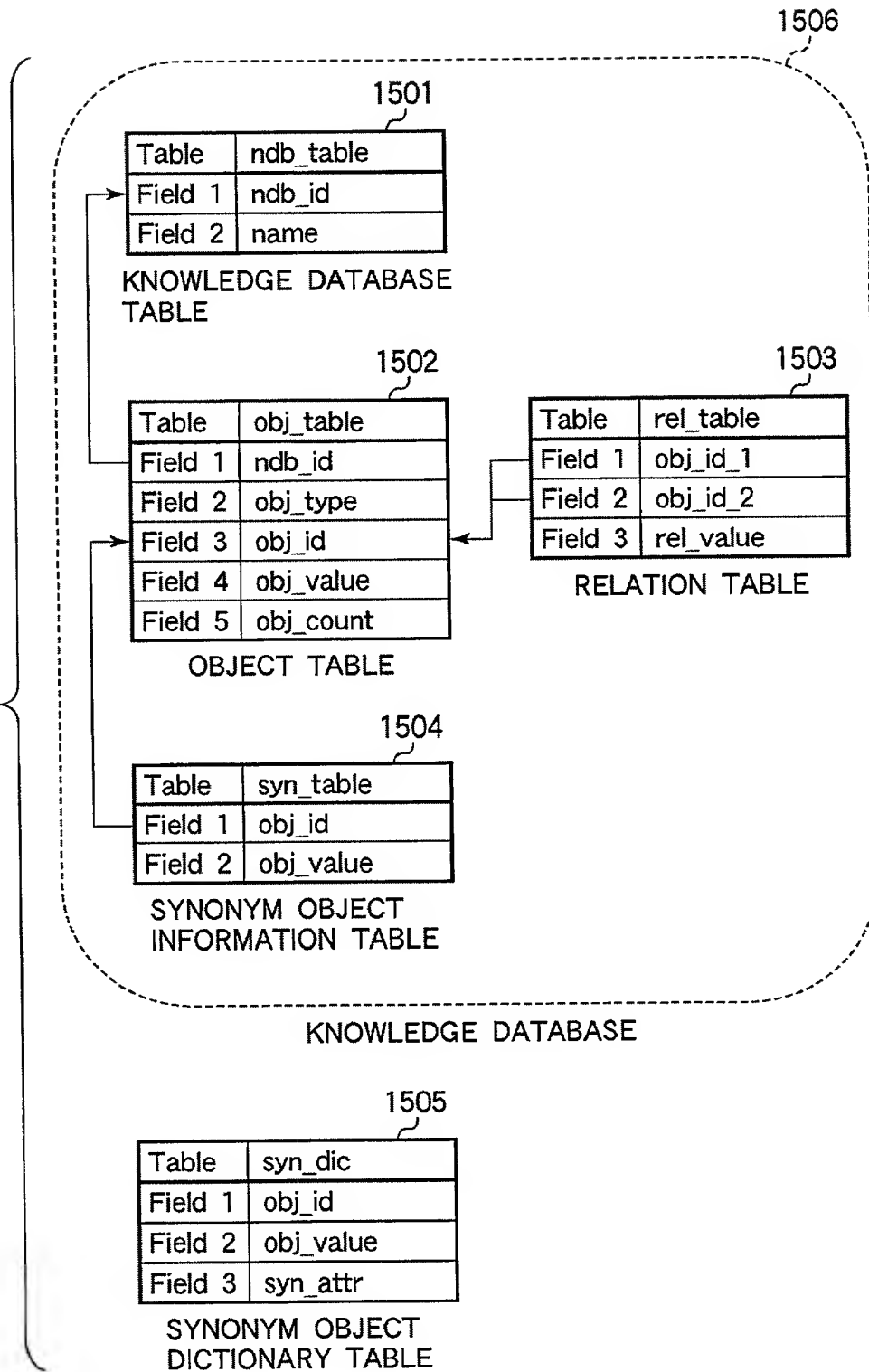


FIG.16

1601
DATABASE NAME : SAMPLE NDB

1602

No	TYPE	VALUE	NUMBER OF OCCURRENCE TIMES
1	PHRASE	DISEASE A	15
2	PHRASE	DISEASE B	10
3	PHRASE	GENE A	10
4	PHRASE	GENE B	5
5	PHRASE	GENE C	10
6	DNA SEQUENCE	ACGTTCGTTAC...	-
7	DNA SEQUENCE	CAGGTCTAAAC...	-
8	DNA SEQUENCE	ACCTTCGTTAC...	-

OBJECT DATA

1603

No No	1	2	3	4	5	6	7	8
1		0	10	5	0	0	0	0
2			0	0	10	0	0	0
3				0	0	-1	0	0
4					0	0	-1	0
5						0	0	-1
6							1	20
7								1
8								

RELATION DATA

FIG.17

1701

ndb_id	NAME
{0701B3FE-775E-4BD0-A851-254397F47B98}	SAMPLE NDB

KNOWLEDGE DATABASE TABLE

1702

ndb_id	obj_id	obj_type	obj_value	obj_count
{0701B3FE-775E-4BD0-A851-254397F47B98}	{0701B3FE-775E-4BD1-A851-254397F47B98}	PHRASE	DISEASE A	15
{0701B3FE-775E-4BD0-A851-254397F47B98}	{0701B3FE-775E-4BD2-A851-254397F47B98}	PHRASE	DISEASE B	10
{0701B3FE-775E-4BD0-A851-254397F47B98}	{0701B3FE-775E-4BD3-A851-254397F47B98}	PHRASE	GENE A	10
{0701B3FE-775E-4BD0-A851-254397F47B98}	{0701B3FE-775E-4BD4-A851-254397F47B98}	PHRASE	GENE B	5
{0701B3FE-775E-4BD0-A851-254397F47B98}	{0701B3FE-775E-4BD5-A851-254397F47B98}	PHRASE	GENE C	10
{0701B3FE-775E-4BD0-A851-254397F47B98}	{0701B3FE-775E-4BD6-A851-254397F47B98}	DNA	ACGTTTCGTTAC...	NULL
{0701B3FE-775E-4BD0-A851-254397F47B98}	{0701B3FE-775E-4BD7-A851-254397F47B98}	DNA	CAGGTCTAAAC...	NULL
{0701B3FE-775E-4BD0-A851-254397F47B98}	{0701B3FE-775E-4BD8-A851-254397F47B98}	DNA	ACCTTCGTTAC...	NULL

OBJECT TABLE

1703

ndb_id_1	obj_id_2	rel_value
{0701B3FE-775E-4BD1-A851-254397F47B98}	{0701B3FE-775E-4BD3-A851-254397F47B98}	10
{0701B3FE-775E-4BD1-A851-254397F47B98}	{0701B3FE-775E-4BD4-A851-254397F47B98}	10
{0701B3FE-775E-4BD2-A851-254397F47B98}	{0701B3FE-775E-4BD5-A851-254397F47B98}	10
{0701B3FE-775E-4BD3-A851-254397F47B98}	{0701B3FE-775E-4BD6-A851-254397F47B98}	-1
{0701B3FE-775E-4BD4-A851-254397F47B98}	{0701B3FE-775E-4BD7-A851-254397F47B98}	-1
{0701B3FE-775E-4BD5-A851-254397F47B98}	{0701B3FE-775E-4BD8-A851-254397F47B98}	-1
{0701B3FE-775E-4BD6-A851-254397F47B98}	{0701B3FE-775E-4BD7-A851-254397F47B98}	1
{0701B3FE-775E-4BD6-A851-254397F47B98}	{0701B3FE-775E-4BD8-A851-254397F47B98}	10
{0701B3FE-775E-4BD7-A851-254397F47B98}	{0701B3FE-775E-4BD8-A851-254397F47B98}	1

RELATION TABLE

FIG.18

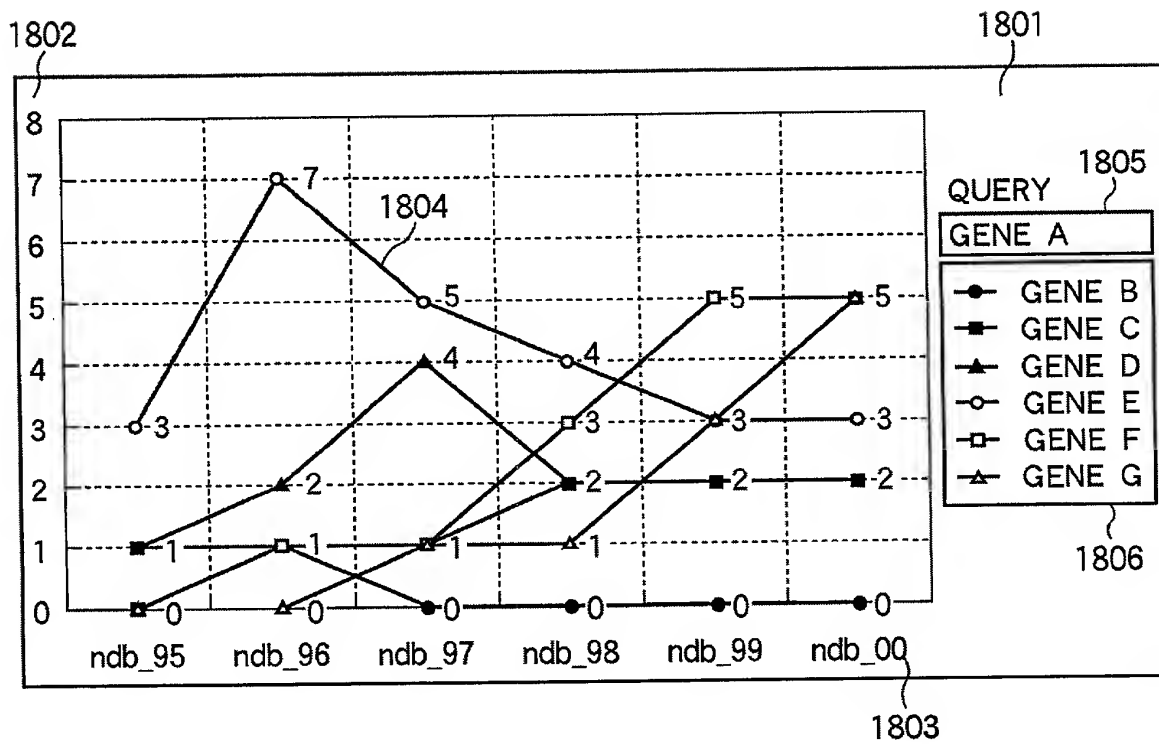


FIG. 19

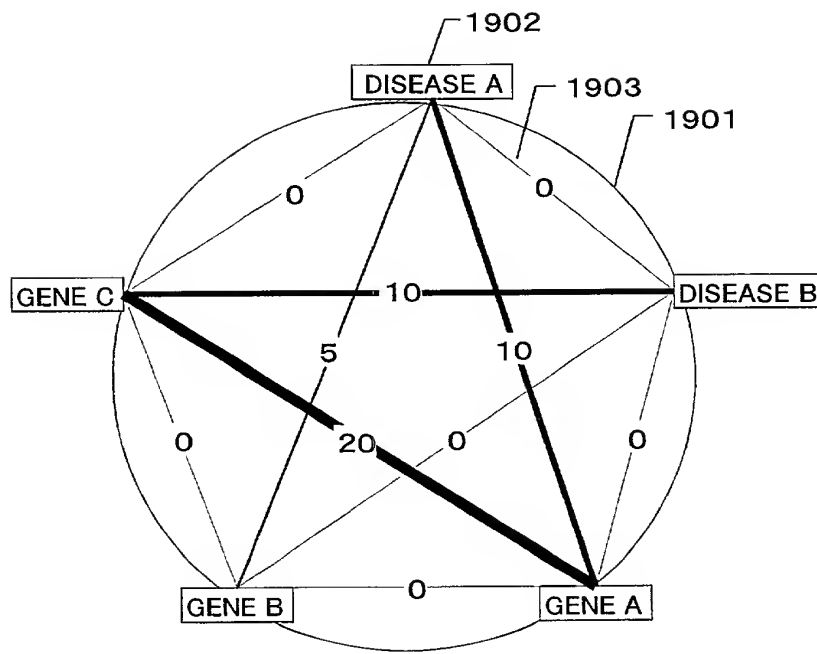


FIG.20

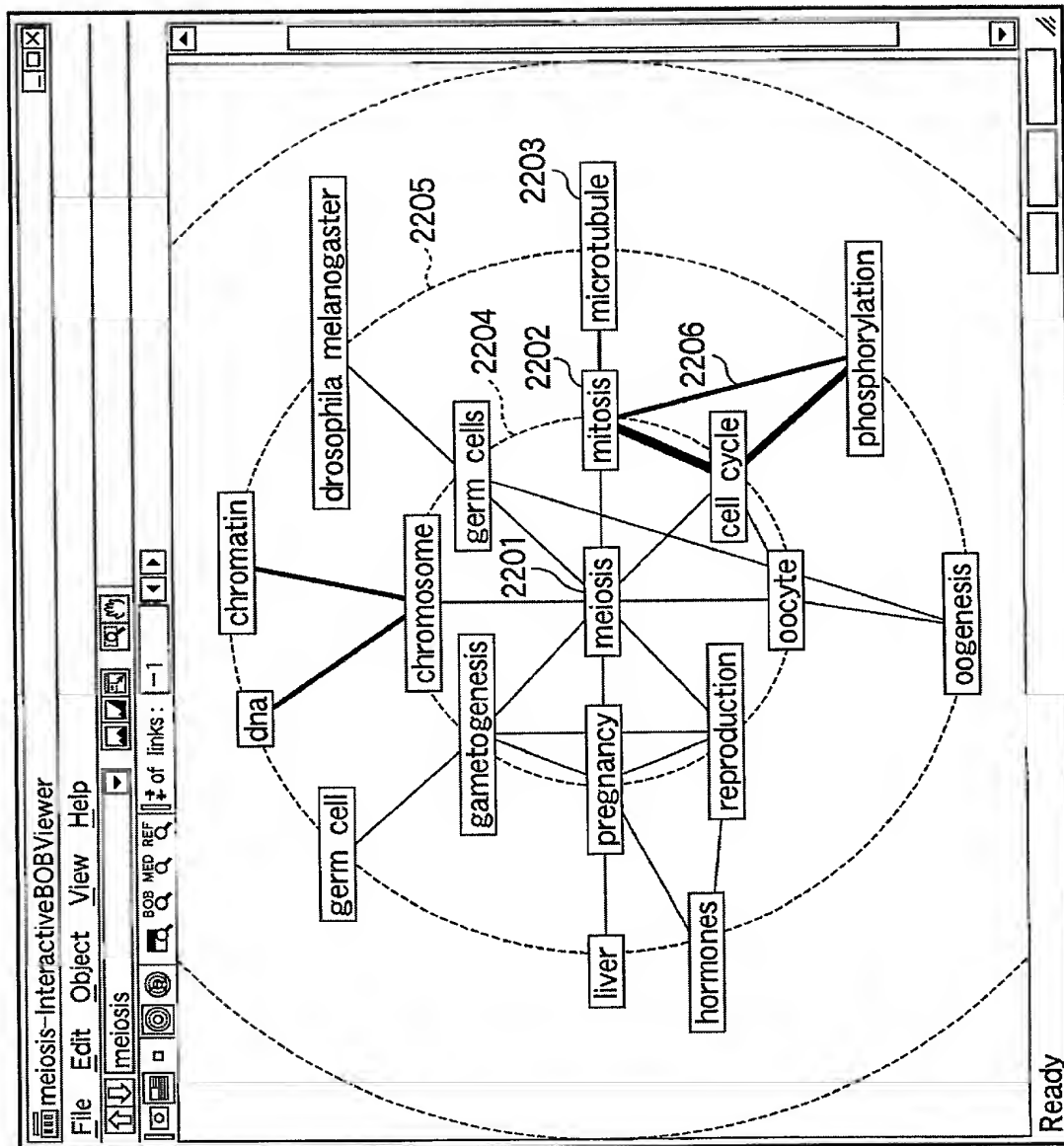


FIG.21

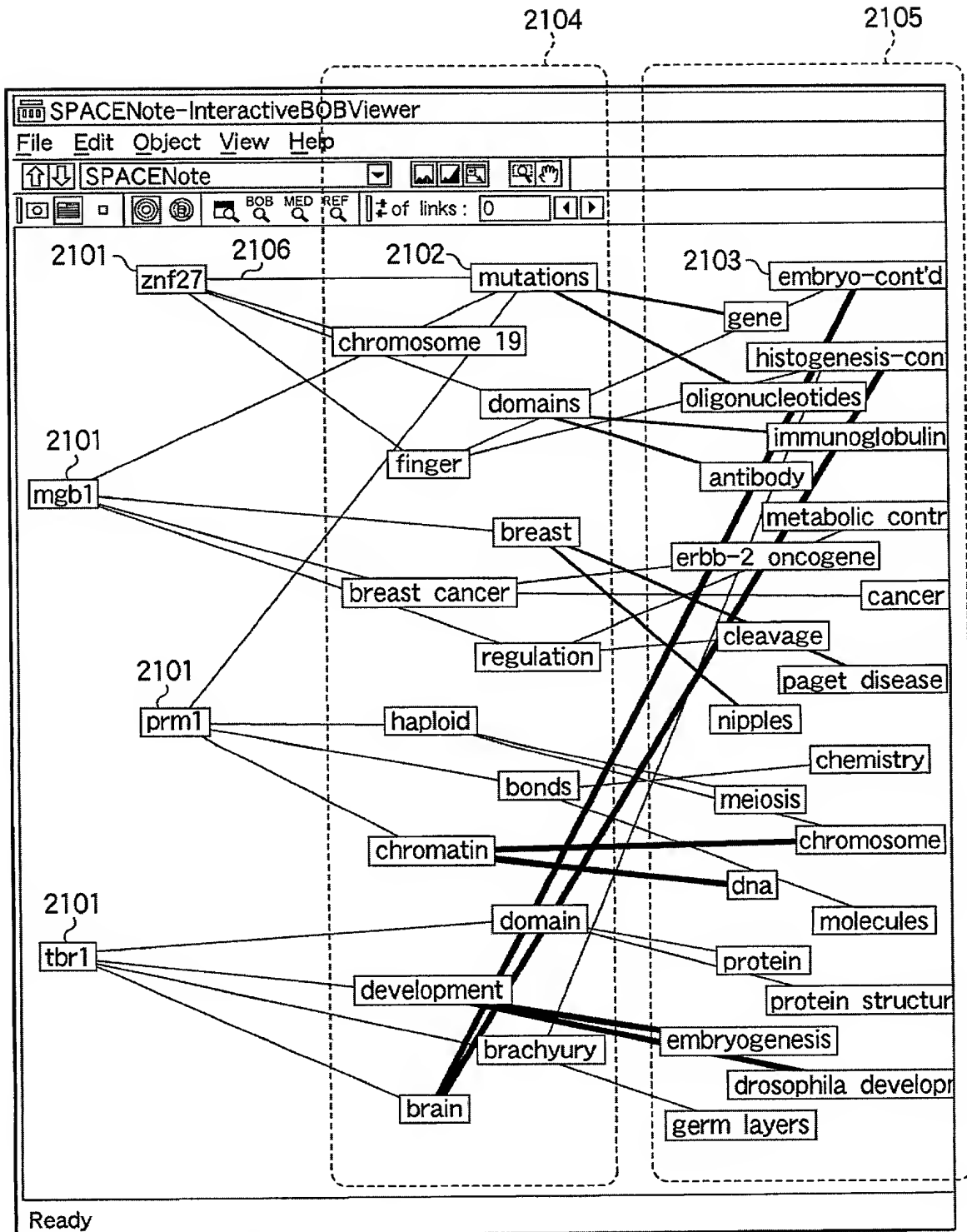


FIG.22

